2. Non-technical Abstract:

We propose to study the safety and biological effects of two genetically engineered vaccines given in combination to treat patients with advanced CEA-bearing tumors. There is no currently available standard therapy which offers a better chance of cure and therefore novel treatment approaches are critical. Studies in animals and in humans have shown these agents to have significant anti-tumor activity and immunologic impact but a more potent activity is needed. In this therapy, the vaccinia and ALVAC viruses are modified to contain the gene for CEA, carcino-embryonic antigen, a protein found very commonly on solid tumors and secreted into the blood stream. This protein is also found in low levels in the GI tract. Injection of these agents will hopefully stimulate the immune system more actively than either vaccine alone to recognize and eliminate cells which have the CEA protein on their surface (tumor cells). We will track patients for responses in their tumors as well as immunologic responses.